

Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, May 17, 2005

1. Attendees

Charles Berrey (USEPA, Aerojet RPM), Alex MacDonald (Regional Water Quality Control Board), Jackie Lane (EPA), Michael Bendow (A-CWS), Michael Girard (Aerojet), Tim Murphy (GenCorp), Tricia Carter (Recorder, CH2M HILL), David Kane (Citrus Heights Water District), Bill Gibson (SEC), Paul Schubert (SCWC), Janis Heple, Herb Niederberger (Sacramento County), John Hervey

2. Approval of Meeting Minutes

Paul Schubert provided a clarification on the March meeting minutes regarding the overview of the Aerojet health study presented by Marilyn Underwood. He noted that daily pumping rates were provided to the Department of Health Services; however, this data is not detailed enough to distinguish pumping averages for landscaping versus consumption per Mike Girard's inquiry on the subject matter during the March meeting. With that clarification noted, the meeting minutes were accepted as final.

3. Update on major milestones and deliverables produced since the September meeting for OU3 and other environmental related efforts at Aerojet.

Charles Berrey updated the CAG on recent regulatory actions. Since the last meeting, the agencies have done the following:

- Agencies disapproved Aerojet's Short-term and Long-term Water Replacement Contingency Plans and requested resubmission in 45 days.
- Agencies requested additional work in response to Aerojet's March 7 Additional Response Iso-concentration Contours and Isotope Analysis consisting of 1) additional monitoring wells for perchlorate source determination and 2) based on monitoring well 30281, requested perchlorate extraction and treatment be added to layers A/B in addition to the planned A3-C4 layer C extractions well.
- Aerojet submitted the Final Design Submission for Area 1 on 4/25/05. Agencies comments are pending. Two layer D monitoring wells should be completed in June which will determine step outs for contamination in the D zone.
- Agencies e-mailed Aerojet a request to complete Area 4 plume contamination definition. Monitoring well 30286 had NDMA detection of 5.3 ppt and additional down gradient investigation is required.
- Area 2 – permanent treatment facility to be fully operational (10 extraction wells = 4,150 gpm) by 7/8/05.
- Area 1 – Two temporary treatment facilities operational (3 extraction wells = 1,100 gpm) by 8/26/05.

Paul asked what the details were for Area 3. Charles reported that there will be 6 extraction wells = 2,700 gpm (5 C-zone wells and 1 D-zone well) which will be addressed by a design report in October.

Other Aerojet Environmental Efforts since March 17, 2005 include:

- Agencies approved Aerojet's site-wide Quality Assurance Project Plan with provision for comments to be incorporated in the next document revision due in a year.
- Agencies requested that Aerojet submit a Background Metals Work Plan within 60 days for pending

source area operable units Remedial Investigation effort. On May 10, 2005, Aerojet submitted a sensitivity analysis recommending a sampling size for the Background Metal Work Plan for Agencies' approval to be followed by the work plan within 60 days of approval of the work plan. Agencies' response is pending.

- Agencies commented and requested response to comments in 60 days on the Perimeter Groundwater Operable Unit Remedial Investigation/Feasibility Study (Agencies letter expressed a preference for the mass removal alternatives and requested the Base Line Risk Assessment be revised to address unrestricted use as a point of departure). Agencies to meet with Aerojet 5/26 to answer Aerojet questions on Agencies comments.

- Agencies commented and requested resubmission in 30 days of Aerojet's Draft Remedial Investigation/Feasibility Work Plan for Source Areas Operable Units. Subsequently, DTSC has indicated it will be providing additional comments. The Agencies granted Aerojet's request to extend the due date to 30 days after receipt of DTSC's additional comments, but no later than 30 days after 5/24 meeting on Boundary Operable Unit field sampling.

- RWQCB commented on the Notice of Preparation, Eastern Sacramento County Replacement Water Supply Project.

- Agencies provided comments to Sacramento Groundwater Authority's comments on the Perimeter Operable Unit Remedial Investigation/Feasibility Study.

- Aerojet submitted the Island Operable Unit Treatability Work Plans. Agencies are reviewing.

- Agencies requested an addendum to the 2005-6 Exhibit Monitoring Plan to be submitted in 60 days to add monitoring in Zones 1 through 4 for preparation of the Perimeter Operable Unit Remedial Design. Aerojet agreed that the work will be completed as part of the investigation for OU6 and not as part of the partial consent decree.

- EPA provided a clarification letter to Aerojet on future deletions for the Superfund Site (soil media).

- Agencies provided comments to the Sacramento County Superior Court on Sacramento Regional Transit District condemnation for easement at Aerojet.

4. Update on Well Installation Activities in OU-3 and Beyond.

Alex MacDonald provided an update for Areas 1 through 4.

Area 1: Aerojet is required to install two additional extraction wells in the D zone to determine the contaminant boundary of the D zone and to target the location for D zone extraction. A second temporary treatment plant will be constructed on Mather Field. Aerojet will determine if the Chettenham well will be used as an extraction well or if a dedicated extraction well needs to be installed. A target negotiation date has been set with Aerojet and Cal American Water Company for 15 August 2005 to determine which course of action will be taken.

Area 2: All wells are in place at a combined extraction rate of 1,000 – 2,000 gpm.

Area 3: Currently looking into locating a treatment plant in the Cordova Parks and Recreation area. Discharge would be sent to the existing ditch that goes into the American River.

Area 4: Carmichael Water District is planning to build two treatment plants with funding provided by Aerojet. Two treatment plants will be installed (Ancel Hoffman Park) instead of one for ease of pipe routing and other installation logistics. The design extraction rate for this area is 900 gpm. A recent detection at the toe of the NDMA plume resulted in a concentration of 5 ppt. Since then, Aerojet has been asked for another proposed location to install another monitoring well and the proposed location

is about 2000 feet southwest of the well with 5 ppt NDMA. Based on the availability of drill rigs, the installation is most likely to happen in July 2005.

IRCTS: There are three existing treatment systems built to address TCE and perchlorate contamination. The system at the Administration Area will be expanded to allow for flows from existing extraction wells on the Sunrise Douglas development. An additional pipeline will be installed under SMUD's easement to bring the extracted water up to the treatment system. A system will be operating shortly at the entrance to the Beta Complex. The system on Mather Field will be constructed adjacent to the planned Aerojet facility with the water initially discharged to Morrison Creek.

OU5: The Aerojet proposal to control the plume migrating from the Superfund site onto the IRCST is to place extraction wells approximately 2000 feet south of White Rock Road on the IRCST property. The wells will be designed to contain the major contamination from migrating farther into the remedy for the IRCST, with the treatment of the extracted water being on Aerojet property.

Alex also noted that he is currently in the process of updating the NPDES permit to address 11 treatment systems to allow for new discharges in the area.

5. Overview of Terms of Recent Settlement Agreements and Water Supply Projects and Planning.

Herb Niederberger provided the following summary on recent settlement agreements:

1. Terms of the Settlement Agreement between Aerojet/Boeing and Sac County/SCWA
 - Eliminates potential litigation involving the County, Sacramento County Water Agency, Aerojet and Boeing regarding the closure of water supply wells in Rancho Cordova
 - Allows for the beneficial reuse of up to 30,000 acre feet per year (AFA) of remediated groundwater
 - Leads the way for other agreements by and between:
 - California American Water Co.
 - American States Water Co.
 - Aerojet and Boeing
 - Sacramento County Water Agency
 - Will transfer ownership of the remediated water from Aerojet and Boeing to the County
 - County will replace sources impacted by groundwater contamination for use within existing service areas
 - Additional water would be made available for future customers
 - Aerojet and Boeing will contribute \$25 million in support of the County's water solution.
 - Other sources of funding, if needed, could include developer and state and federal funds.
2. Terms of the Water Supply Delivery Agreement between American States Water Company and Sac County/SCWA
 - Makes replacement water available consistent with an allocation plan developed through an annual meet and confer process
 - County's obligation is capped at 15,200AFA
 - County will construct facilities to convey the water to ASWC at specific delivery points
 - County will make 5000 AFA available to ASWC at its existing diversion point on the American River for use at its Coloma Water Treatment Plant
 - Costs will be in accordance with cost of water absent contamination
 - Acknowledges existing service areas of ASWC and SCWA
 - ASWC will forbear any adjudication of the ground water Basin
 - ASWC will withdraw its fully appropriated stream petition

3. Pending discussions between CalAm and Sac County/SCWA

- Will be similar in concept to ASWC Agreement
- Will make replacement water available consistent with an allocation plan developed through an annual meet and confer process
- Will finalize service area boundaries within Rio Del Oro

4. The Notice of Preparation (NOP) for the Eastern Sacramento County Replacement Water Supply Project

- Intended to make use of the water made available from the Aerojet Boeing Settlements
- Preferred project includes permitted discharges to both Alder Creek and Buffalo Creek
- 10,000 AFA from Aerojet remedy to go to Folsom South Canal – 5,000 AFA to ASWC, 5,000 AFA to the Cosumnes River as part of an agreement with The Nature Conservancy and South Sacramento County Association Water Agencies
- Remainder of remediated groundwater to be picked up at the intake for FRWP
- NOP comment period closed. DERA has hired a consultant for DEIR

5. Integrated Water Supply Planning for Rancho Cordova

A. Current Supplies

- Surface Water
 - o American River
- Groundwater

B. Future Supplies

- Surface Water
 - o American River
 - o Sacramento River
- Groundwater
- Remediated Water made available for reuse
- Recycled Water made available from SRCSD

Charles asked what the timeframe was for the 5,000 acre-feet for the Eastern Sacramento County Replacement Water Supply Project that will be going into the Folsom South Canal and if a schedule has been developed as water becomes available. Herb noted that it is dependant upon discharges to Alder Creek. An exchange agreement from the Bureau of Reclamation will be necessary. There are some unexpected flow standards that have been placed on the discharge rates. Herb also noted that it would be ideal to time the Aerojet development with the city so that construction is simultaneous (10,000 acre feet piped to make it easier for the exchange). The goal to have this completed is by 2011.

Herb noted that there was another agreement (East Bay Mud) that was reached allowing for the 5,000 AFA without needing to pursue additional litigation.

Janis asked if the interim discharge into Morrison creek was a part of the agreement for IRCTS and what the total volume of the discharge would be. Herb responded that this would be up to 30,000 acre feet. There would be negotiations with the Chettenham well if it became an extraction well as to who owns the water. If the water needs to be discharged then it needs to be included and addressed in the agreement with Cal America Water Company. There are no proposals for direct reuse of the water. 15,000 acre feet are allocated to SCWC and 15,000 acre feet to American States.

Charles made one last statement noting that the EPA would like the Sacramento Groundwater

Authority to have a united position on OU-6 (for there to be one voice).

6. Group Discussion of an Overall Groundwater Contamination Map.

Janis noted the need for assembling and organizing the information presented on the EPA website to create more user friendly material to help orient new people to the site (i.e. take the information and maps and lay out in a way to be able to better process the information). In response to Janis' previous request for an all inclusive plume map, Aerojet provided their composite map showing the extent of TCE, perchlorate, and NDMA associated with the Aerojet Sacramento Site, IRCTS and White Rock North Dump as of May 2005. EPA also provided their map delineating concentrations of contaminants of concern greater than the cleanup levels. Janis noted that a combination of these two maps will suffice her request.

7. Next Meeting.

Next meeting: Tuesday, July 19, 2005, Sheriff's substation, Community Room, 10361 Rockingham Way (just off Mather), Rancho Cordova, 7 p.m. to 9 p.m.